

Title (en)

OPTICAL DEVICE FOR BORING USING A LASER BEAM

Title (de)

OPTISCHE VORRICHTUNG ZUM BOHREN MITTELS LASERSTRAHLS

Title (fr)

DISPOSITIF OPTIQUE POUR LE FORAGE A L'AIDE D'UN FAISCEAU LASER

Publication

EP 1015166 B1 20030625 (DE)

Application

EP 98954138 A 19980907

Priority

- DE 9802639 W 19980907
- DE 19741029 A 19970918

Abstract (en)

[origin: DE19741029A1] The invention relates to an optical device for boring using a laser beam (5), comprising an optical system for guiding the laser beam (5) on a circular cutting course, said optical system being arranged in the beam path, and focusing optics (6) for focusing the laser beam (5) on a workpiece (7). The optical system contains an image rotation device (4) which can be rotated separately, the beam being guided on the cutting course with said image rotation device. The inventive device is therefore simply constructed and has a simple means of adjusting the various parameters.

IPC 1-7

B23K 26/06; **B23K 26/00**

IPC 8 full level

B23K 26/00 (2006.01); **B23K 26/06** (2006.01); **B23K 26/064** (2014.01); **B23K 26/388** (2014.01)

CPC (source: EP US)

B23K 26/06 (2013.01 - EP US); **B23K 26/064** (2015.10 - EP US); **B23K 26/0648** (2013.01 - EP US); **B23K 26/0652** (2013.01 - EP US); **B23K 26/0665** (2013.01 - EP US); **B23K 26/388** (2013.01 - US); **B23K 26/389** (2015.10 - EP)

Cited by

US11111727B2; DE102006053268B4

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 19741029 A1 19990408; DE 59808837 D1 20030731; EP 1015166 A1 20000705; EP 1015166 B1 20030625; ES 2202904 T3 20040401; JP 2001516648 A 20011002; JP 4399107 B2 20100113; US 6355907 B1 20020312; WO 9914010 A1 19990325

DOCDB simple family (application)

DE 19741029 A 19970918; DE 59808837 T 19980907; DE 9802639 W 19980907; EP 98954138 A 19980907; ES 98954138 T 19980907; JP 2000511608 A 19980907; US 50910600 A 20000320